

Systemic immune inflammation index

The systemic-immune-inflammation index, is based on neutrophil (N), platelet (P) and lymphocyte (L) counts, has emerged and reflects comprehensively the balance of host inflammatory and immune status.

Preoperative [systemic immune inflammation index](#) (SII) and the [albumin/globulin ratio](#) (AGR) have been used as [prognostic markers](#) in many malignancies. A study was conducted to evaluate the clinical significance of the preoperative SII and AGR in [high grade glioma](#) (HGG) patients.

A total of 169 [patients](#) with newly diagnosed [HGG](#) were enrolled in the [study](#). [Overall survival](#) (OS) of these patients was estimated by [Kaplan Meier analysis](#). [Univariate](#) and multivariate [Cox regression](#) analyses were performed to examine the relationships between OS and prognostic variables in patients with HGG.

The cut-off values for SII and AGR were $324.38 \times 10^9/L$ and 1.35, respectively. An inverse correlation was observed between SII and AGR. The Kaplan-Meier survival analyses demonstrated that high SII and low AGR were associated with poor OS of patients with HGG ($P = 0.002$ and $P = 0.012$, respectively). Multivariate analyses revealed that both SII (HR 1.641, 95% CI: 1.071-2.515; $P = 0.023$) and AGR (HR 0.566, 95% CI: 0.335-0.956; $P = 0.033$) were independent predictive indicators of OS of HGG patients.

Liang et al., demonstrated that high [SII](#) and low [AGR](#) values may serve as promising prognostic markers to identify [HGG](#) patients with poor [prognosis](#) ¹⁾.

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Liang R, Li J, Tang X, Liu Y. The prognostic role of preoperative systemic immune-inflammation index and albumin/globulin ratio in patients with newly diagnosed high-grade glioma. Clin Neurol Neurosurg. 2019 Jun 24;184:105397. doi: 10.1016/j.clineuro.2019.105397. [Epub ahead of print] PubMed PMID: 31306893.

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